REMARKS

Applicant respectfully requests reconsideration of this application as amended. No claims have been amended, added, or canceled by this amendment. Therefore, claims 31-60 are presented for examination.

The amendments to the claims to the claims made by this Response are not being made for the purpose of overcoming the prior art. Instead, these amendments are being made to clarify and/or correct claim formalities and/or objections raised by the Examiner.

35 U.S.C. §103(a) Rejections

In order to establish a *prima facie* case of obviousness:

"First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." (Emphasis added). *In re Vaech*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Manual of Patent Examining Procedure (MPEP), 8th Edition, August 2001, §2143.

Avery in view of Garcia

Claims 31-33 and 36-60 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Avery (U.S. Publication No. 2004/0015622) in view of Garcia et al. (U.S. Patent No. 6,163,834, hereinafter "Garcia").

Applicant respectfully submits that the Examiner has not established a prima facie case of obviousness because:

1. The prior art references do not teach or suggest all the claim limitations.
2. There is no suggestion or motivation in Avery or Garcia for modification or combination.

Neither Avery nor Garcia teaches or suggests all the claim limitations

Applicant respectfully submits that claims 31-33 and 36-60 of the subject application are not obvious over Avery in view of Garcia. For example, neither Avery nor Garcia teaches or suggests several features of claim 31. For example, Avery and Garcia do not teach or suggest, at the least, "in response to receiving a memory access request comprising a virtual address and a key entry, locating a region in a translation and protection table (TPT), the region being associated with a region entry", as required by, for example, claim 31. Each of the other pending independent claims recite limitations that are similar to these limitations of claim 31, although some differences may exist among the limitations of the other pending independent claims. These similar limitations nevertheless patentably distinguish the claims over Avery in view of Garcia.

The Examiner asserts that Avery teaches this element at paragraph 31 of Avery. However, this portion of Avery cited by the Examiner teaches nothing more than a translation and protection table that is used "to translate virtual addresses to physical addresses and to validate access rights to the memory", which is generally known to those of ordinary skill in the art. This portion of Avery cited by the Examiner does not teach access to a TPT using a request that includes a virtual address as well as a key entry, as required by, for example, claim 31. Furthermore, Applicant fails to find where this element is taught or suggested at all in Avery. Avery also does not teach using a virtual address and/or key entry to locate a TPT region, also as required by, for example, claim 31.

Furthermore, Garcia does not teach this element that is missing from Avery. Garcia teaches access to a TPT entry holding a physical address using a memory handle obtained from a memory handle table (MHT), and using the memory handle and a virtual address from a TPT. Garcia, however, fails to teach or disclose using a virtual address and a key entry to locate a region in a TPT, where the region is associated with a region entry in the TPT, to validate access.

Thus, since neither Avery nor Garcia teaches or suggests all the claim limitations, it is respectfully submitted that the Examiner has failed to establish prima facie that claims 31-33 and 36-60 are obvious in view of Avery and Garcia.

Thus, it is respectfully submitted that the Examiner's rejection of these claims under 35 U.S.C. §103(a) as obvious in view of Avery and Garcia be withdrawn.

There is no suggestion or motivation in Avery or in Garcia for modification or combination

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). MPEP §2143.01. Furthermore, though a combined element may be a "technologically simple concept", the reference must still provide the motivation for the combination. (*In re Kotzah*, 217 F.3d at 1371, 55 USPQ2d at 1318.) MPEP §2143.01.

Avery lacks the motivation for combination with Garcia, and Garcia lacks the motivation for combination with Avery because the two references are directed to solving different problems. Avery simply discloses the implementation of a PCI DMA speculative prefetch in a message queue oriented bus system in which a TPT may be used (see for example, Avery, paragraph 31), and Garcia discloses implementation of a two table lookup for calculating physical addresses, where one of the tables may include a TPT (see, for example, Garcia, column 4, lines 26-31). Since Avery is directed to solving the problem of prefetching by PCI peripherals in a system that uses a message-passing bus architecture, and Garcia is directed to solving a problem with then-existing TPT's.

Avery and Garcia, therefore, each lack the motivation for combination with the other.

Thus, since both Avery and Garcia lack the suggest or motivation for combination with one another, it is respectfully submitted that the Examiner has failed to establish prima facie that claims 31-33 and 36-60 are obvious in view of Avery and Garcia. Thus, it is respectfully submitted that the Examiner's rejection of these claims under 35 U.S.C. §103(a) as obvious in view of Avery and Garcia be withdrawn.

Allowable Subject Matter

Applicant thanks the Examiner for the indication of allowable subject matter in claims 34-35. Applicant respectfully maintains that claims 31-33 and 36-60 are additionally patentably distinguished over the prior art, and therefore allowable, and will consequently wait until the next Office Action to determine what course of action to take with respect to the allowable claims.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance. Therefore, allowance at an early date is respectfully requested.

The Examiner is invited to initiate an interview with the undersigned by calling 949-498-0601 if the Examiner believes that such an interview will advance prosecution of this application.

Request for an Extension of Time

Applicant respectfully petitions for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 50-0221 to cover any necessary fee under 37 C.F.R. § 1.17(a) for such an extension.

Charge our Deposit Account

Please charge any shortage to our Deposit Account No. 50-0221.

Respectfully submitted,

Date: December 30, 2004

Libby H. Hope, Patent Attorney
Reg. No. 46,774
Patent Practice Group
INTEL CORPORATION

c/o Blakely, Sokoloff, Taylor & Zafman
12400 Wilshire Boulevard
7th Floor
Los Angeles, California 90025-1030
(949) 498-0601